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Serial No. 09/916,919

Reply to Office Action dated: 01/25/06

Response dated: 02/27/06

**PATENT
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Amendments to the claims

Please cancel claims 5 and 18 without prejudice.

Please amend claims 1 and 12 as follows:

1. (Currently Amended) A method of recording multiple programs onto a storage medium, comprising the steps of:

receiving a plurality of multimedia inputs, each having at least one respective, different program therein;

sampling the multimedia inputs such that the sampled multimedia inputs contain a portion of the plurality of multimedia inputs;

providing at least one dummy input signal to be combined with the sampled multimedia inputs to improve encoding efficiency;

combining the sampled multimedia inputs and said at least one dummy input signal; and

encoding the combined multimedia inputs such that the number of encoding devices required to encode the combined multimedia inputs is less than the number of the plurality of programs.

2. (Original) The method according to claim 1, further comprising the step of playing back the sampled multimedia inputs.

3. (Original) The method according to claim 2, wherein said playing back step further comprises the steps of:

decoding at least one of the encoded sampled multimedia inputs to provide a decoded signal; and

processing the decoded signal to enable the display of at least one of the multimedia inputs.

4. (Original) The method according to claim 3, wherein said processing step further comprises the step of upconverting at least one of the sampled multimedia inputs.

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5. (Cancelled)

6. (Original) The method according to claim 1, wherein the plurality of multimedia inputs contain multimedia data selected from the group comprising video, audio or a combination thereof.

7. (Original) The method according to claim 1, wherein each of the plurality of multimedia inputs contain audio and video.

8. (Original) The method according to claim 6, wherein the multimedia inputs containing video include a D1 video signal and said sampling step further comprises the step of sampling the D1 video signal to a one-half D1 video signal.

9. (Original) The method according to claim 6, wherein the multimedia inputs containing video include a D1 video signal and said sampling step further comprises the step of sampling the D1 video signal to an SIF video signal.

10. (Original) The method according to claim 6, wherein the multimedia inputs containing audio include an audio signal with more than two channels of audio and said sampling step further comprises the step sampling the audio signal to a stereo signal.

11. (Original) The method according to claim 6, wherein the multimedia inputs containing audio include an audio signal with more than two channels of audio and said sampling step further comprises the step sampling the audio signal to a mono signal.

12. (Currently Amended) A system for encoding a plurality of multimedia input signals having multiple programs, comprising:

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at least one sampler for sampling the multimedia input signals such that the sampled multimedia input signals contain a portion of the plurality of multimedia input signals, each of said multimedia input signals having at least one respective, different program therein;

a dummy signal generator for providing at least one dummy input signal to be combined with at least one of the sampled multimedia inputs to improve encoding efficiency;

a combiner for combining the sampled multimedia input signals and said at least one dummy input signal; and

at least one encoder for encoding the combined multimedia input signals, wherein the number of encoders is less than the plurality of programs.

13. (Original) The system according to claim 12, wherein the plurality of multimedia input signals comprise audio signals and the system comprises:

a receiver for receiving the audio signals;

a downmixer for downmixing the audio signals; and

at least one encoder for encoding the downmixed audio signals, wherein the number of encoders is less than the number of audio signals.

14. (Original) The system according to claim 13, wherein the plurality of multimedia inputs signals are video signals and audio signals and the system further comprises a multiplexer for multiplexing the video and the audio signals.

15. (Original) The system according to claim 14, further comprising:

a decoder for decoding at least one of the encoded sampled multimedia inputs to provide a decoded signal; and

a processor for processing the decoded signal to enable the display of at least one of the multimedia inputs.

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16. (Original) The system according to claim 15, further comprising a demultiplexer for demultiplexing the audio and video signals.

17. (Original) The system according to claim 16, further comprising a display device for outputting the audio and video signals.

18. (Cancelled)

19. (Original) The system according to claim 12, wherein the number of encoders is less than the number of samplers used for sampling the multimedia input signals.

20. (Previously Presented) A system for encoding a plurality of multimedia input signals, wherein the multimedia input signals contain video signals and audio signals comprising:

- a receiver for receiving the plurality of multimedia input signals, each having at least one respective, different program therein;

- at least one sampler for sampling the multimedia input signals such that the sampled multimedia input signals contain a portion of the plurality of multimedia input signals;

- a combiner for combining the sampled multimedia input signals;

- at least one encoder for encoding the combined multimedia input signals, wherein the number of encoders is less than the plurality of programs;

- a multiplexer for multiplexing the video and the audio signals;

- a decoder for decoding at least one of the encoded combined multimedia inputs to provide at least one decoded signal;

- a processor for processing the decoded signal to enable the display of at least one of the multimedia inputs;

- a demultiplexer for demultiplexing the audio and video signals;

- a display device for outputting the audio and video signals; and

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a dummy program generator for providing a dummy input to be combined with at least one of the sampled multimedia inputs.